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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/224,980	01/04/1999	ANTHONY R. WALDROP	2003-1	3080

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EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 02/03/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/224,980

Applicant(s)

WALDROP ET AL.

Examiner

Jenna-Leigh Befumo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Amendment D, submitted as Paper No. 16 on November 5, 2002, has been entered. Claims 6, 7, and 10 – 14 have been cancelled. Claims 15 – 21 have been added. Therefore, the pending claims are 15 – 21.
2. The cancellation of claims 6, 7, and 10 – 14 renders moots the grounds of rejections set forth in the previous Office Action. New grounds of rejection are set forth below.

Priority

3. As set forth previously, this application is granted an effective filing date of January 6, 1998, based on US Patent 5,856,249. The applicant argues (Amendment D, page 2) that the application should be granted priority to US Patent 5,807,794 since that patent discloses use of three distinct yarns which can be disposed in the warp and weft direction. However, '794 teaches that the fabric is a knit fabric with *weft inserted yarns* and *yarns laid in the warp direction*. No where does '794 disclose that the fabric can be a woven fabric instead of knit fabric and no where does '794 teach that the weft inserted yarns are interwoven with the yarns laid-in the warp direction. Thus, the claimed invention, i.e., a textile comprising a first set of yarns *interwoven* with a second set of yarns, is not taught by the disclosure in '794.

According to the MPEP, if a claim in a continuation-in-part application recites a feature which was not disclosed or adequately supported by a proper disclosure under 35 U.S.C. 112 in the parent nonprovisional application, but which was first introduced or adequately supported in the continuation-in-part application such a claim is entitled only to the filing date of the continuation-in-part application. In this case the parent application, 09/003,560 is a continuation

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of 08/863,974, or US 5,807,794. The fabric in this application is being produced by an entirely different method than that disclosed by '794 and therefore, '794 does not adequately support the claimed subject matter since '794 does not enable one of ordinary skill in the art to make a woven fabric. Therefore, the effective filing date granted claims 15 – 21 is January 6, 1998. Additionally, it is noted that '794 fails to disclose adding a UV stabilizer to the elastomeric material in the textured polyester yarns as recited in claim 15, as well as teach the claimed yarn density and yarns deniers recited in claims 18 – 21, or the weave structure recited in claim 17.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 15 – 21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 3 and 6 – 8 of U.S. Patent No. 5,856,249. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of the claims in US 5,856,249 encompasses the woven fabric of this invention since US 5,856,249 is claims a woven fabric comprising a UV resistance elastomeric monofilament in a first direction interwoven with a UV resistant multifilament yarn comprising synthetic and elastic filaments woven together in a barathea weave.

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6. Claims 15 – 21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 5,855,991 in view of Gretzinger et al. (4,469,739). US 5,855,991 claims a woven fabric comprising an elastomeric bicomponent monofilament in one direction, interwoven with a plurality of yarns running in a second direction. While US 5,855,991 fails to claim that the elastomeric monofilament is UV resistant, Gretzinger et al. discloses it is well known and customary to add UV stabilizers to elastomeric materials (column 8, lines 39 – 44). Therefore, it would have been obvious to one of ordinary skill in the art to add UV stabilizers to the elastomeric monofilament to protect against UV degradation. Thus, the scope of the woven fabric claimed in US 5,855,991 in combination with Gretzinger et al. encompasses the scope of the woven fabric recited in this application.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claim 15 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gretzinger et al. in view of Stumpf et al. (6,035,901).

The features of Gretzinger et al. have been set forth in the previous Office Actions. Gretzinger et al. discloses a woven fabric comprising an elastomeric sheath/core monofilament, corresponding to the Applicant's first yarns, running in one direction and a set of yarns, corresponding to the Applicant's second yarns, running in a perpendicular direction. Gretzinger et al. discloses that it is customary to add UV stabilizers to the elastomeric filaments (column 8, lines 40 – 44). Also, the elastomeric monofilament comprises a sheath which has a melting temperature at least 20°C lower than the melting temperature of the core (column 8, lines 64 –

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66). The yarns running in a perpendicular direction are made from non-elastomeric natural or synthetic yarn such as polyethylene terephthalate (column 9, lines 6 – 20). Additionally, Gretzinger et al. teaches that minor amounts of elastomer can be added to the yarns running in the perpendicular direction (column 11, lines 1 – 5). Gretzinger et al. fails to teach using a textured yarn mixed with elastomeric filaments as the yarn running perpendicular to the elastomeric monofilaments.

Stumpf et al. is drawn to woven seating support fabrics. Stumpf et al. discloses a woven fabric comprising elastomeric monofilaments running in one direction and yarns comprising polyester and elastic filaments running in the perpendicular direction, as shown in Figures 36 - 38 (column 17, lines 5 – 10). The yarns comprise multi-filaments which are either spun, textured, or twisted yarns mixed with elastic filaments (column 18, lines 63 – 66). Textured yarns are known in the art to produce yarns with increased bulk which in turn increases the softness of the yarns and makes the woven support more comfortable and have a better hand. Therefore, it would have been obvious for one having ordinary skill in the art to substitute the textured yarns comprising polyester and elastomeric filaments taught by Stumpf et al. for the yarns running perpendicular to the elastomeric monofilaments taught by Gretzinger et al., since Gretzinger et al. discloses these yarns can include elastomeric material and the textured yarn would improve the hand and softness of the woven support fabric making it more comfortable to sit on.

Further, since Gretzinger et al. discloses that it is customary to stabilize elastomeric filaments with UV stabilizers, it would have been obvious for one having ordinary skill in the art to stabilize the elastomeric material dispersed in the perpendicular yarns as well to improve the

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elastomeric filaments resistance to UV light, and in turn increase the life of the fabric.

Therefore, claims 15 and 16 are rejected.

Finally, Gretzinger et al. does not teach the density or denier of the warp and fill yarns. However, Gretzinger et al. disclose that the density and denier of the fill and warp yarns can be varied (column 10, lines 63 – 68). Therefore, it would have been obvious to one having ordinary skill in the art to choose the claimed density (i.e. picks/inch and ends/inch) and deniers, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215. One of ordinary skill in the art would be motivated to optimize the density of the yarns and the denier of the yarns to control the breathability, texture, hand, weight, and strength of the fabric. Therefore, claims 18 – 21 are rejected.

Gretzinger et al. fails to teach using a fabric woven into a baratheave weave. However, it would have been obvious for one having ordinary skill in the art to choose a known weave pattern based on its suitability for the intended use. One of ordinary skill in the art would be motivated to choose the baratheave weave pattern since it will be provide improved comfort and hand. In this case, the baratheave weave has an increased number of floats in the fill direction so that the multi-filament yarn running perpendicular to the elastomeric monofilament would cover the majority of the fabric's surface producing a fabric which is softer to the touch and is more comfortable to the user since the multi-filament yarn is more aesthetically pleasing than the elastomeric monofilament. Therefore, claim 17 is rejected.

9. Claims 15 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stumpf et al. in view of Gretzinger et al.

The features of Stumpf et al. and Gretzinger et al. have been set forth above. Stumpf et al. disclose a woven fabric with an elastomeric monofilament, corresponding to the Applicant's first set of yarns, in a first direction and a spun or textured yarn, corresponding to the Applicant's second set of yarns, in a second perpendicular direction. The spun or textured yarns can include elastic components incorporated into each strand 376 (column 18, line 66 – column 19, line 2).

Stumpf et al. discloses that the elastomeric monofilament can have a denier of 2350 (column 17, lines 22 – 23) and have a density of about 24 – 26 monofilaments per inch (column 18, line 59). Additionally, Stumpf et al. discloses the density of the yarns is about 7 – 10 yarns per inch (column 19, lines 17 – 18).

Stumpf et al. fails to teach that the elastomeric yarns are sheath/core bicomponent yarns. Gretzinger et al. is drawn to woven seat supports. Gretzinger et al. teach using a sheath/core bicomponent yarn as the elastomeric monofilament in the woven seat support. The sheath can be heat set to stabilize the weave by bonding the yarns and the monofilaments together. The sheath has a melting point of at least 20°C below the melting point of the core. Additionally, Gretzinger et al. discloses it is customary to add UV stabilizers to the elastomeric filaments. Therefore, it would have been obvious for one having ordinary skill in the art to substitute the sheath/core bicomponent yarn taught by Gretzinger et al. for the elastomeric components in the woven seat support taught by Stumpf et al. so that the fabric can be bonded at the crossovers to increase the stability of the fabric and make it less likely to unravel. Additionally, it would have been obvious to one having ordinary skill in the art to add UV stabilizers, as taught by Gretzinger et al., to the elastomeric filaments taught by Stumpf et al. to increase the life of the elastomeric

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material in the seat support by improving the elastomeric filaments resistance to UV light. Thus, claims 15 and 16 are rejected.

Further, it would have been obvious to one having ordinary skill in the art to choose the claimed density (i.e. picks/inch and ends/inch) and deniers, since it has been held to be within the general skill of a worker in the art to discovering an optimum value of a result effective variable (i.e., density and denier) as set forth above. Therefore, claims 18 – 21 is rejected.

Finally, Stumpf et al. fails to teach using a fabric woven into a barathea weave. However, it would have been obvious for one having ordinary skill in the art to choose the barathea weave pattern based on its suitability for the intended use. In this case, one of ordinary skill in the art would be motivated to choose the barathea weave pattern since it will be comfortable to the user by placing the softer yarns (i.e., the multi-filament textured yarns) on the surface of the fabric while providing equally distributed support to the user as taught by Stumpf et al. (column 19, lines 19 – 38). Therefore, claim 17 is rejected.

10. Claims 15 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLarty, III (5,855,991) in view of Gretzinger et al.

The features of McLarty, III '991 have been set forth in the previous Office Actions. McLarty, III '991 discloses a woven fabric comprising textured polyester yarns intermingled with elastomeric components running in one direction and sheath/core bicomponent monofilaments running in the perpendicular direction. The sheath component has a melting temperature greater than 30°C below the melting temperature of the core component (column 3, lines 55 – 57). The monofilament has a denier of about 2250 (column 3, lines 53 – 54). A denier of about 2250 would include 2200 as recited in claim 13. Additionally, the fabric is woven to

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have about 22 ends per inch and about 20 picks per inch. About 22 ends per inch would include 20 ends/inch recited in claim 12. McLarty, III '991 fails to teach using UV stabilized elastomeric components.

The features of Gretzinger et al. have been set forth above. Gretzinger et al. discloses it is customary to add UV stabilizers to elastomeric fibers. Therefore, it would have been obvious for one having ordinary skill in the art to add UV stabilizers to the elastomeric components in both sets of yarns in the woven fabric taught by McLarty, III '991 to increase the life of the fabric by increasing the fabric's resistance to UV degradation. Therefore, claims 15, 16, and 18 – 21 are rejected.

McLarty, III '991 fails to teach using a baratheave weave pattern. it would have been obvious for one having ordinary skill in the art to choose a known weave pattern based on its suitability for the intended use. One of ordinary skill in the art would be motivated to choose the baratheave weave pattern which will be comfortable to the user by placing the softer yarns (i.e., the multi-filament yarns) on the surface of the fabric while providing equally distributed support to the user. Therefore, claim 17 is rejected.

Response to Arguments

11. Applicant's arguments filed November 6, 2002 have been fully considered but they are not persuasive. The Applicant argues that the Gretzinger et al. and Stumpf et al. fail to teach or suggest the addition of UV stabilizer to the elastomeric material in the multi-filament yarns. However, Gretzinger et al. teaches that it is customary and known to add UV stabilizers to elastomeric filaments. While Gretzinger et al. might be specifically discussing the sheath/core elastomeric monofilament when this statement is made, this still suggests to one of ordinary skill

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in the art that UV stabilizers are regularly added to elastomeric filaments in general. Thus, one of ordinary skill in the art would be motivated to use elastomeric filaments in the multi-filaments yarns which have UV stabilizers since it is recognized in the art, as stated by Gretzinger et al., that it is customary to add UV stabilizers to elastomeric filaments to improve the fibers resistance to UV light which in turn increases the life of the material. Otherwise the elastomeric filaments would become brittle and crack or break. Therefore, this teaching by Gretzinger et al. would motivate one of ordinary skill in the art to add the UV stabilizer to all elastomeric filaments, and not just the elastomeric monofilaments, to increase the life of the fibers. Thus, the rejection is maintained.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (9:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo
January 30, 2003



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